

us-09-997-628-349.ra1

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 7, 2004, 06:56:54 ; Search time 22 Seconds
(without alignments)
213.544 Million cell update

s/sec

Title: US-09-997-628-349
Perfect score: 496
Sequence: 1 MRGPGHPLLGLLLVLGPSP.....KRCARLLTRLAVSPVCMEDK 9
1

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : Issued Patents_AA:*
1: /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being pri
nted,
and is derived by analysis of the total score distribution.

SUMMARIES

Result	%	Query				
No.	Score	Match Length DB	ID			Description

1	65.5	13.2	402	4	US-09-029-755C-5	Sequence	5
, Appli							
2	65.5	13.2	409	4	US-09-029-755C-2	Sequence	2
, Appli							
3	64	12.9	928	1	US-08-442-248-2	Sequence	2
, Appli							
4	64	12.9	928	1	US-08-440-815-2	Sequence	2
, Appli							
5	64	12.9	928	3	US-08-486-449-2	Sequence	2
, Appli							
6	64	12.9	928	4	US-08-578-684-2	Sequence	2
, Appli							
7	64	12.9	953	4	US-09-751-389-7	Sequence	7
, Appli							
8	64	12.9	967	2	US-08-449-645A-30	Sequence	3
0, Appl							
9	64	12.9	967	2	US-08-702-367A-30	Sequence	3
0, Appl							
10	64	12.9	975	4	US-09-751-389-8	Sequence	8
, Appli							
11	64	12.9	991	2	US-08-449-645A-13	Sequence	1
3, Appl							
12	64	12.9	991	2	US-08-702-367A-13	Sequence	1
3, Appl							
13	64	12.9	991	5	PCT-US95-04681-13	Sequence	1
3, Appl							
14	64	12.9	1005	2	US-08-469-537A-103	Sequence	1
03, App							
15	63	12.7	877	2	US-08-673-789-2	Sequence	2
, Appli							
16	62	12.5	363	4	US-09-489-039A-8168	Sequence	8
168, Ap							
17	61.5	12.4	877	2	US-08-916-917-2	Sequence	2
, Appli							
18	61.5	12.4	877	2	US-08-972-631-2	Sequence	2
, Appli							
19	61.5	12.4	877	2	US-08-972-629-2	Sequence	2
, Appli							
20	61.5	12.4	877	2	US-08-972-630-2	Sequence	2
, Appli							
21	61.5	12.4	877	2	US-08-672-211-2	Sequence	2
, Appli							
22	61.5	12.4	877	3	US-09-225-170-2	Sequence	2
, Appli							
23	60.5	12.2	802	1	US-07-862-021B-12	Sequence	1
2, Appl							

					us-09-997-628-349.ra1	
24	60.5	12.2	802	1	US-08-313-288B-12	Sequence 1
2, Appl						
25	60.5	12.2	802	5	PCT-US93-03164-12	Sequence 1
2, Appl						
26	60	12.1	1205	1	US-07-908-245-2	Sequence 2
, Appli						
27	60	12.1	1205	2	US-08-319-866-10	Sequence 1
0, Appl						
28	60	12.1	1205	3	US-09-123-708-6	Sequence 6
, Appli						
29	60	12.1	1205	3	US-09-123-624-6	Sequence 6
, Appli						
30	59.5	12.0	233	4	US-09-328-352-5266	Sequence 5
266, Ap						
31	59	11.9	95	4	US-09-029-755C-7	Sequence 7
, Appli						
32	59	11.9	370	4	US-09-252-991A-16913	Sequence 1
6913, A						
33	59	11.9	668	3	US-09-436-605-2	Sequence 2
, Appli						
34	58	11.7	265	4	US-09-799-345-4	Sequence 4
, Appli						
35	58	11.7	265	4	US-09-962-276-4	Sequence 4
, Appli						
36	58	11.7	337	4	US-09-543-681A-6300	Sequence 6
300, Ap						
37	58	11.7	375	4	US-09-328-352-6078	Sequence 6
078, Ap						
38	58	11.7	710	1	US-08-162-809-22	Sequence 2
2, Appl						
39	58	11.7	722	1	US-08-162-809-4	Sequence 4
, Appli						
40	58	11.7	744	1	US-08-162-809-20	Sequence 2
0, Appl						
41	57.5	11.6	368	4	US-09-252-991A-19443	Sequence 1
9443, A						
42	57.5	11.6	400	3	US-09-220-528-63	Sequence 6
3, Appl						
43	57.5	11.6	400	4	US-09-187-906-21	Sequence 2
1, Appl						
44	57.5	11.6	3672	2	US-08-822-445-12	Sequence 1
2, Appl						
45	57.5	11.6	3672	4	US-09-396-540-12	Sequence 1
2, Appl						
46	57.5	11.6	3801	2	US-08-822-445-10	Sequence 1
0, Appl						
47	57.5	11.6	3801	4	US-09-396-540-10	Sequence 1
0, Appl						

					us-09-997-628-349.ra		
48	57	11.5	265	4	US-09-799-345-5		Sequence 5
, Appli							
49	57	11.5	265	4	US-09-799-345-6		Sequence 6
, Appli							
50	57	11.5	265	4	US-09-962-276-5		Sequence 5
, Appli							
51	57	11.5	265	4	US-09-962-276-6		Sequence 6
, Appli							
52	57	11.5	407	3	US-08-665-259-29		Sequence 2
9, Appl							
53	57	11.5	407	3	US-08-762-500-29		Sequence 2
9, Appl							
54	57	11.5	451	4	US-09-489-039A-11654		Sequence 1
1654, A							
55	57	11.5	478	4	US-09-252-991A-28496		Sequence 2
8496, A							
56	57	11.5	610	4	US-08-368-776A-3		Sequence 3
, Appli							
57	57	11.5	610	5	PCT-US96-00419-3		Sequence 3
, Appli							
58	57	11.5	626	4	US-08-368-776A-5		Sequence 5
, Appli							
59	57	11.5	626	5	PCT-US96-00419-5		Sequence 5
, Appli							
60	57	11.5	986	2	US-08-548-159-3		Sequence 3
, Appli							
61	57	11.5	993	4	US-08-368-776A-11		Sequence 1
1, Appl							
62	57	11.5	994	4	US-08-368-776A-12		Sequence 1
2, Appl							
63	57	11.5	998	2	US-08-449-645A-17		Sequence 1
7, Appl							
64	57	11.5	998	2	US-08-702-367A-17		Sequence 1
7, Appl							
65	57	11.5	998	4	US-08-368-776A-2		Sequence 2
, Appli							
66	57	11.5	998	5	PCT-US95-04681-17		Sequence 1
7, Appl							
67	57	11.5	998	5	PCT-US96-00419-2		Sequence 2
, Appli							
68	56.5	11.4	339	4	US-09-673-395A-217		Sequence 2
17, App							
69	56.5	11.4	360	3	US-09-231-227-2		Sequence 2
, Appli							
70	56.5	11.4	360	4	US-09-768-585-2		Sequence 2
, Appli							
71	56.5	11.4	522	3	US-08-821-984-10		Sequence 1
0, Appl							

us-09-997-628-349.ra

72	56.5	11.4	522	3	US-09-329-749-10	Sequence 1
0, Appl						
73	56.5	11.4	522	4	US-09-502-264-10	Sequence 1
0, Appl						
74	56	11.3	190	4	US-09-252-991A-32444	Sequence 3
2444, A						
75	56	11.3	414	4	US-09-489-039A-8888	Sequence 8
888, Ap						
76	56	11.3	422	4	US-09-540-236-2283	Sequence 2
283, Ap						
77	56	11.3	506	3	US-08-840-146-18	Sequence 1
8, Appl						
78	56	11.3	506	3	US-09-360-220-18	Sequence 1
8, Appl						
79	56	11.3	976	2	US-08-449-645A-18	Sequence 1
8, Appl						
80	56	11.3	976	2	US-08-702-367A-18	Sequence 1
8, Appl						
81	56	11.3	976	5	PCT-US95-04681-18	Sequence 1
8, Appl						
82	56	11.3	977	2	US-08-673-789-8	Sequence 8
, Appli						
83	55.5	11.2	181	4	US-09-252-991A-31827	Sequence 3
1827, A						
84	55.5	11.2	197	4	US-09-252-991A-24190	Sequence 2
4190, A						
85	55.5	11.2	286	3	US-09-203-716-1	Sequence 1
, Appli						
86	55.5	11.2	286	4	US-09-684-254-1	Sequence 1
, Appli						
87	55.5	11.2	286	4	US-09-409-926-1	Sequence 1
, Appli						
88	55.5	11.2	288	4	US-09-305-856B-2	Sequence 2
, Appli						
89	55.5	11.2	288	5	PCT-US92-00282-19	Sequence 1
9, Appl						
90	55.5	11.2	311	2	US-08-318-837-9	Sequence 9
, Appli						
91	55.5	11.2	389	4	US-09-594-193-8	Sequence 8
, Appli						
92	55.5	11.2	403	3	US-08-665-259-30	Sequence 3
0, Appl						
93	55.5	11.2	403	3	US-08-665-259-32	Sequence 3
2, Appl						
94	55.5	11.2	403	3	US-08-762-500-30	Sequence 3
0, Appl						
95	55.5	11.2	403	3	US-08-762-500-32	Sequence 3
2, Appl						

					us-09-997-628-349.ra1	
96	55.5	11.2	443	4	US-09-594-193-9	Sequence 9
, Appli						
97	55.5	11.2	508	4	US-09-134-001C-4570	Sequence 4
570, Ap						
98	55.5	11.2	533	5	PCT-US92-00282-3	Sequence 3
, Appli						
99	55.5	11.2	701	4	US-09-252-991A-27999	Sequence 2
7999, A						
100	55	11.1	295	4	US-09-799-345-2	Sequence 2
, Appli						

ALIGNMENTS

RESULT 1

US-09-029-755C-5

; Sequence 5, Application US/09029755C

; Patent No. 6326477

; GENERAL INFORMATION:

; APPLICANT: ILMEN, Marja

; APPLICANT: SOEDERLUND, Hans

; APPLICANT: PENTTILA, Merja

; TITLE OF INVENTION: PROCESS FOR MODIFYING GLUCOSE REPRESSION

; FILE REFERENCE: Substitute Sequence Listing-09-029755

; Patent No. 6326477

; CURRENT APPLICATION NUMBER: US/09/029,755C

; CURRENT FILING DATE: 1998-03-02

; PRIOR APPLICATION NUMBER: PCT/FI96/00463

; PRIOR FILING DATE: 1996-08-30

; PRIOR APPLICATION NUMBER: FI 954123

; PRIOR FILING DATE: 1995-09-01

; NUMBER OF SEQ ID NOS: 21

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 5

; LENGTH: 402

; TYPE: PRT

; ORGANISM: Trichoderma reesei QM 9414

US-09-029-755C-5

Query Match 13.2%; Score 65.5; DB 4; Length 402;
 Best Local Similarity 37.5%; Pred. No. 3.3;
 Matches 18; Conservative 2; Mismatches 15; Indels 13; G
 aps 2;

Qy	46	YFSPKCSKHFHRLYHNTRD-----CTIPAYYKRCARL--LTR	80
Db	57	YKCPLCDKAFHRLEHQTRHIRTHTGEKPHACQFPGCSKKFSRSDDELTR	104

us-09-997-628-349.ra1

;
; STREET: 460 Point San Bruno Blvd
;
; CITY: South San Francisco
;
; STATE: California
;
; COUNTRY: USA
;
; ZIP: 94080
;
; COMPUTER READABLE FORM:
;
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
;
; COMPUTER: IBM PC compatible
;
; OPERATING SYSTEM: PC-DOS/MS-DOS
;
; SOFTWARE: patin (Genentech)
;
; CURRENT APPLICATION DATA:
;
; APPLICATION NUMBER: US/08/442,248
;
; FILING DATE: 15-MAY-1995
;
; CLASSIFICATION: 435
;
; PRIOR APPLICATION DATA:
;
; APPLICATION NUMBER: 08/330128
;
; FILING DATE: 27-OCT-1994
;
; ATTORNEY/AGENT INFORMATION:
;
; NAME: Torchia, Timothy E.
;
; REGISTRATION NUMBER: 36,700
;
; REFERENCE/DOCKET NUMBER: 920C4
;
; TELECOMMUNICATION INFORMATION:
;
; TELEPHONE: 415/225-8674
;
; TELEFAX: 415/952-9881

OM protein - protein search, using sw model

Run on: June 7, 2004, 06:57:39 ; Search time 568 Seconds
(without alignments)
45.074 Million cell updates/sec

Title: US-09-997-628-349
Perfect score: 496
Sequence: 1 MRGPGHPLLLGLLLVLGPSP.....KRCARLLTRLAVSPVCMEDK 91

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1155919 seqs, 281338677 residues

Total number of hits satisfying chosen parameters: 1155919

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : Published_Applications_AA:*
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep:*
10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep:*
11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep:*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep:*
16: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
17: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep:*
18: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	%	Query				
No.	Score	Match	Length	DB	ID	Description

1	496	100.0	91	9	US-09-989-722-349	Sequence 349, App
2	496	100.0	91	9	US-09-989-723-349	Sequence 349, App
3	496	100.0	91	9	US-09-989-279-349	Sequence 349, App
4	496	100.0	91	9	US-09-989-727-349	Sequence 349, App
5	496	100.0	91	9	US-09-989-731-349	Sequence 349, App
6	496	100.0	91	9	US-09-989-732-349	Sequence 349, App
7	496	100.0	91	9	US-09-991-073-349	Sequence 349, App
8	496	100.0	91	9	US-09-990-442-349	Sequence 349, App
9	496	100.0	91	9	US-09-991-163-349	Sequence 349, App
10	496	100.0	91	9	US-09-993-604-349	Sequence 349, App
11	496	100.0	91	9	US-09-990-456-349	Sequence 349, App
12	496	100.0	91	9	US-09-989-721-349	Sequence 349, App
13	496	100.0	91	9	US-09-992-598-349	Sequence 349, App
14	496	100.0	91	9	US-09-989-293A-349	Sequence 349, App
15	496	100.0	91	9	US-09-989-735-349	Sequence 349, App
16	496	100.0	91	9	US-09-990-444-349	Sequence 349, App
17	496	100.0	91	9	US-09-991-181-349	Sequence 349, App
18	496	100.0	91	9	US-09-989-730-349	Sequence 349, App
19	496	100.0	91	9	US-09-990-436-349	Sequence 349, App
20	496	100.0	91	9	US-09-993-687-349	Sequence 349, App
21	496	100.0	91	10	US-09-989-734-349	Sequence 349, App
22	496	100.0	91	10	US-09-997-653-349	Sequence 349, App
23	496	100.0	91	10	US-09-993-667-349	Sequence 349, App
24	496	100.0	91	10	US-09-997-428-349	Sequence 349, App
25	496	100.0	91	10	US-09-997-666-349	Sequence 349, App
26	496	100.0	91	10	US-09-990-438-349	Sequence 349, App
27	496	100.0	91	10	US-09-990-562-349	Sequence 349, App
28	496	100.0	91	10	US-09-990-711-349	Sequence 349, App
29	496	100.0	91	10	US-09-989-726-349	Sequence 349, App
30	496	100.0	91	10	US-09-998-156-349	Sequence 349, App
31	496	100.0	91	10	US-09-990-437-349	Sequence 349, App
32	496	100.0	91	10	US-09-991-157-349	Sequence 349, App
33	496	100.0	91	10	US-09-997-514-349	Sequence 349, App
34	496	100.0	91	10	US-09-997-573-349	Sequence 349, App
35	496	100.0	91	10	US-09-991-172-349	Sequence 349, App
36	496	100.0	91	10	US-09-990-726-349	Sequence 349, App
37	496	100.0	91	10	US-09-997-559-349	Sequence 349, App
38	496	100.0	91	10	US-09-997-601-349	Sequence 349, App
39	496	100.0	91	10	US-09-990-443-349	Sequence 349, App
40	496	100.0	91	10	US-09-991-854-349	Sequence 349, App
41	496	100.0	91	10	US-09-997-628-349	Sequence 349, App
42	496	100.0	91	10	US-09-997-683-349	Sequence 349, App
43	496	100.0	91	10	US-09-989-729A-349	Sequence 349, App
44	496	100.0	91	10	US-09-997-349-349	Sequence 349, App
45	496	100.0	91	10	US-09-997-440-349	Sequence 349, App
46	496	100.0	91	10	US-09-990-440-349	Sequence 349, App
47	496	100.0	91	10	US-09-993-469-349	Sequence 349, App
48	496	100.0	91	10	US-09-997-542-349	Sequence 349, App
49	496	100.0	91	10	US-09-993-748-349	Sequence 349, App
50	496	100.0	91	10	US-09-990-439-349	Sequence 349, App
51	496	100.0	91	10	US-09-990-427-349	Sequence 349, App
52	496	100.0	91	10	US-09-989-328-349	Sequence 349, App
53	496	100.0	91	10	US-09-993-583-349	Sequence 349, App
54	496	100.0	91	10	US-09-941-992-349	Sequence 349, App
55	496	100.0	91	10	US-09-992-521-349	Sequence 349, App
56	496	100.0	91	10	US-09-997-333-349	Sequence 349, App

57	496	100.0	91	10	US-09-997-384-349	Sequence 349, App
58	496	100.0	91	10	US-09-998-041-349	Sequence 349, App
59	496	100.0	91	10	US-09-997-585-349	Sequence 349, App
60	496	100.0	91	10	US-09-997-614-349	Sequence 349, App
61	496	100.0	91	10	US-09-989-862-349	Sequence 349, App
62	496	100.0	91	10	US-09-997-529-349	Sequence 349, App
63	496	100.0	91	10	US-09-989-725-349	Sequence 349, App
64	496	100.0	91	11	US-09-989-733-349	Sequence 349, App
65	496	100.0	91	11	US-09-992-643-349	Sequence 349, App
66	496	100.0	91	12	US-09-989-724-349	Sequence 349, App
67	496	100.0	91	12	US-09-989-728-349	Sequence 349, App
68	496	100.0	91	12	US-09-990-441-349	Sequence 349, App
69	496	100.0	91	12	US-09-997-857-349	Sequence 349, App
70	496	100.0	91	12	US-09-997-641-349	Sequence 349, App
71	496	100.0	91	12	US-09-991-150-349	Sequence 349, App
72	496	100.0	91	15	US-10-219-538-349	Sequence 349, App
73	456	91.9	152	12	US-10-169-395-10	Sequence 10, Appl
74	76	15.3	570	14	US-10-032-585-7848	Sequence 7848, Ap
75	71	14.3	641	14	US-10-138-098-38	Sequence 38, Appl
76	71	14.3	1006	14	US-10-138-098-46	Sequence 46, Appl
77	71	14.3	1064	14	US-10-138-098-41	Sequence 41, Appl
78	70	14.1	416	9	US-09-801-368-80	Sequence 80, Appl
79	68.5	13.8	578	12	US-10-425-114-45326	Sequence 45326, A
80	68.5	13.8	632	12	US-10-424-599-249595	Sequence 249595,
81	68	13.7	430	13	US-10-029-180-32	Sequence 32, Appl
82	66.5	13.4	338	9	US-09-815-242-13457	Sequence 13457, A
83	66.5	13.4	338	9	US-09-815-242-13645	Sequence 13645, A
84	66.5	13.4	338	12	US-10-282-122A-74204	Sequence 74204, A
85	66	13.3	677	12	US-10-282-122A-53291	Sequence 53291, A
86	65.5	13.2	92	12	US-10-424-599-210353	Sequence 210353,
87	65.5	13.2	258	12	US-10-282-122A-66902	Sequence 66902, A
88	65.5	13.2	318	14	US-10-032-585-7357	Sequence 7357, Ap
89	65	13.1	336	14	US-10-128-714-8083	Sequence 8083, Ap
90	65	13.1	2412	16	US-10-408-765A-214	Sequence 214, App
91	64.5	13.0	389	14	US-10-138-098-33	Sequence 33, Appl
92	64.5	13.0	390	14	US-10-138-098-31	Sequence 31, Appl
93	64.5	13.0	842	14	US-10-138-098-40	Sequence 40, Appl
94	64.5	13.0	1006	14	US-10-138-098-45	Sequence 45, Appl
95	64.5	13.0	1064	14	US-10-138-098-43	Sequence 43, Appl
96	64	12.9	185	12	US-10-425-114-58759	Sequence 58759, A
97	64	12.9	408	14	US-10-205-032-34	Sequence 34, Appl
98	64	12.9	480	11	US-09-973-424A-55	Sequence 55, Appl
99	64	12.9	928	8	US-08-578-684-2	Sequence 2, Appli
100	64	12.9	953	14	US-10-412-277-7	Sequence 7, Appli

ALIGNMENTS

RESULT 1

US-09-989-722-349

; Sequence 349, Application US/09989722

; Patent No. US20020072067A1

; GENERAL INFORMATION:

; APPLICANT: Ashkenazi, Avi J.

; APPLICANT: Baker, Kevin P.

; APPLICANT: Botstein, David

; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2730P1C63
; CURRENT APPLICATION NUMBER: US/09/989,722
; CURRENT FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: 60/049787
; PRIOR FILING DATE: 1997-06-16
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/065186
; PRIOR FILING DATE: 1997-11-12
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066770
; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: 60/075945
; PRIOR FILING DATE: 1998-02-25
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/083322
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 60/084600
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/087106
; PRIOR FILING DATE: 1998-05-28
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/087609
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/087759
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/087827
; PRIOR FILING DATE: 1998-06-03
; PRIOR APPLICATION NUMBER: 60/088021
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088025

; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088026
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088028
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088029
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088030
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088033
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088326
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088167
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/088202
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/088212
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/088217
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/088655
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: 60/088734
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088738
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088742
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088810
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088824
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088826
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088858
; PRIOR FILING DATE: 1998-06-11
; PRIOR APPLICATION NUMBER: 60/088861
; PRIOR FILING DATE: 1998-06-11
; PRIOR APPLICATION NUMBER: 60/088876
; PRIOR FILING DATE: 1998-06-11
; PRIOR APPLICATION NUMBER: 60/089105
; PRIOR FILING DATE: 1998-06-12
; PRIOR APPLICATION NUMBER: 60/089440
; PRIOR FILING DATE: 1998-06-16
; PRIOR APPLICATION NUMBER: 60/089512
; PRIOR FILING DATE: 1998-06-16
; PRIOR APPLICATION NUMBER: 60/089514
; PRIOR FILING DATE: 1998-06-16
; PRIOR APPLICATION NUMBER: 60/089532
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089538
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089598
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089599
; PRIOR FILING DATE: 1998-06-17

; PRIOR APPLICATION NUMBER: 60/089600
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089653
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089907
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089908
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089947
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/089948
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/089952
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/090246
; PRIOR FILING DATE: 1998-06-22
; PRIOR APPLICATION NUMBER: 60/090252
; PRIOR FILING DATE: 1998-06-22
; PRIOR APPLICATION NUMBER: 60/090254
; PRIOR FILING DATE: 1998-06-22
; PRIOR APPLICATION NUMBER: 60/090349
; PRIOR FILING DATE: 1998-06-23
; PRIOR APPLICATION NUMBER: 60/090355
; PRIOR FILING DATE: 1998-06-23
; PRIOR APPLICATION NUMBER: 60/090429
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090431
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090435
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090444
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090445
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090472
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090535
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090540
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090542
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090676
; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090678
; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090690
; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090694
; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090695
; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090696

```
; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090862
; PRIOR FILING DATE: 1998-06-26
; PRIOR APPLICATION NUMBER: 60/090863
; PRIOR FILING DATE: 1998-06-26
; PRIOR APPLICATION NUMBER: 60/091360
; PRIOR FILING DATE: 1998-07-01
; PRIOR APPLICATION NUMBER: 60/091478
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091544
; PRIOR FILING DATE: 1998-07-01
; PRIOR APPLICATION NUMBER: 60/091519
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091626
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091633
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091978
; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: 60/091982
; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: 60/092182
; PRIOR FILING DATE: 1998-07-09
```

```
Query Match          100.0%;  Score 496;  DB 9;  Length 91;
Best Local Similarity 100.0%;  Pred. No. 4.7e-52;
Matches 91;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps 0;
```

```
Qy      1 MRGPGHPLLLGLLLVLGPSPEQRVEIVPRDLRMKDKFLKHLTGPLYFSPKCSKHFHRLYH 60
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1 MRGPGHPLLLGLLLVLGPSPEQRVEIVPRDLRMKDKFLKHLTGPLYFSPKCSKHFHRLYH 60

Qy      61 NTRDCTIPAYYKRCARLLTRLAVSPVCMEDK 91
        |||||||:||||||||||||||||||||||
Db      61 NTRDCTIPAYYKRCARLLTRLAVSPVCMEDK 91
```

RESULT 2

US-09-989-723-349

; Sequence 349, Application US/09989723

; Patent No. US20020072092A1

GENERAL INFORMATION:

```
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Napier, Mary A.
```

; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2730P1C62
; CURRENT APPLICATION NUMBER: US/09/989,723
; CURRENT FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: 60/049787
; PRIOR FILING DATE: 1997-06-16
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/065186
; PRIOR FILING DATE: 1997-11-12
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066770
; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: 60/075945
; PRIOR FILING DATE: 1998-02-25
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/083322
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 60/084600
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/087106
; PRIOR FILING DATE: 1998-05-28
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/087609
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/087759
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/087827
; PRIOR FILING DATE: 1998-06-03
; PRIOR APPLICATION NUMBER: 60/088021
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088025
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088026
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088028
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088029
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088030
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088033
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088326

; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088167
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/088202
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/088212
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/088217
; PRIOR FILING DATE: 1998-06-05
; PRIOR APPLICATION NUMBER: 60/088655
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: 60/088734
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088738
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088742
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088810
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088824
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088826
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088858
; PRIOR FILING DATE: 1998-06-11
; PRIOR APPLICATION NUMBER: 60/088861
; PRIOR FILING DATE: 1998-06-11
; PRIOR APPLICATION NUMBER: 60/088876
; PRIOR FILING DATE: 1998-06-11
; PRIOR APPLICATION NUMBER: 60/089105
; PRIOR FILING DATE: 1998-06-12
; PRIOR APPLICATION NUMBER: 60/089440
; PRIOR FILING DATE: 1998-06-16
; PRIOR APPLICATION NUMBER: 60/089512
; PRIOR FILING DATE: 1998-06-16
; PRIOR APPLICATION NUMBER: 60/089514
; PRIOR FILING DATE: 1998-06-16
; PRIOR APPLICATION NUMBER: 60/089532
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089538
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089598
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089599
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089600
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089653
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089907
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089908
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089947
; PRIOR FILING DATE: 1998-06-19

; PRIOR APPLICATION NUMBER: 60/089948
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/089952
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/090246
; PRIOR FILING DATE: 1998-06-22
; PRIOR APPLICATION NUMBER: 60/090252
; PRIOR FILING DATE: 1998-06-22
; PRIOR APPLICATION NUMBER: 60/090254
; PRIOR FILING DATE: 1998-06-22
; PRIOR APPLICATION NUMBER: 60/090349
; PRIOR FILING DATE: 1998-06-23
; PRIOR APPLICATION NUMBER: 60/090355
; PRIOR FILING DATE: 1998-06-23
; PRIOR APPLICATION NUMBER: 60/090429
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090431
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090435
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090444
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090445
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090472
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090535
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090540
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090542
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090676
; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090678
; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090690
; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090694
; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090695
; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090696
; PRIOR FILING DATE: 1998-06-25
; PRIOR APPLICATION NUMBER: 60/090862
; PRIOR FILING DATE: 1998-06-26
; PRIOR APPLICATION NUMBER: 60/090863
; PRIOR FILING DATE: 1998-06-26
; PRIOR APPLICATION NUMBER: 60/091360
; PRIOR FILING DATE: 1998-07-01
; PRIOR APPLICATION NUMBER: 60/091478
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091544
; PRIOR FILING DATE: 1998-07-01
; PRIOR APPLICATION NUMBER: 60/091519

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 7, 2004, 06:56:55 ; Search time 20 Seconds
(without alignments)
437.671 Million cell updates/sec

Title: US-09-997-628-349
Perfect score: 496
Sequence: 1 MRGPGHPLLLGLLLVLGPSP.....KRCARLLTRLAVSPVCMEDK 91

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283366 seqs, 96191526 residues

Total number of hits satisfying chosen parameters: 283366

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : PIR_78:*
1: pirl:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	% Query					Description
	No.	Score	Match	Length	DB ID	
1	76.5	15.4	214	2	B72658	hypothetical prote
2	70.5	14.2	565	2	T39863	zinc finger protei
3	70	14.1	416	2	A41694	regulatory protein
4	69	13.9	284	2	T27523	hypothetical prote
5	69	13.9	300	2	B84104	transcription regu
6	69	13.9	427	2	JN0785	Carbon catabolite
7	68.5	13.8	419	2	JE0389	catabolite repress
8	67	13.5	474	2	S66480	carbon catabolite
9	67	13.5	1200	2	E84473	probable retroelem
10	66.5	13.4	338	2	E95244	glycerol-3-phospha
11	66.5	13.4	338	2	C98109	glycerol-3-phospha
12	65.5	13.2	402	2	S70703	carbon catabolite
13	65.5	13.2	409	2	S70704	carbon catabolite

14	65.5	13.2	1307	2	H84467	probable retroelem
15	65	13.1	418	2	C97713	proline/betaine tr
16	64	12.9	893	2	S51603	receptor-like tyro
17	64	12.9	898	2	S47489	receptor tyrosine
18	64	12.9	981	2	S51604	receptor-like tyro
19	64	12.9	991	2	I78843	receptor protein-t
20	64	12.9	1005	2	S49015	receptor tyrosine
21	63.5	12.8	203	2	T16577	hypothetical prote
22	63	12.7	877	2	I48967	brain-specific kin
23	62.5	12.6	504	2	S17248	regulatory protein
24	62.5	12.6	770	1	TWBYA2	transcription fact
25	62.5	12.6	1277	2	T32731	PAR interacting pr
26	62	12.5	348	2	G86241	hypothetical prote
27	62	12.5	915	2	B59433	chromosome 5 GAP-1
28	61.5	12.4	376	2	A84840	probable strictosi
29	61.5	12.4	418	2	H95407	probable aminometh
30	61.5	12.4	608	2	S05341	probable reverse t
31	61	12.3	142	2	T08048	coproporphyrinogén
32	61	12.3	214	2	T39559	probable ubiquinol
33	61	12.3	275	2	B81430	probable prephenat
34	61	12.3	310	2	E36953	lipoic acid syntha
35	61	12.3	583	2	T32713	hypothetical prote
36	61	12.3	923	2	T41350	meiotic recombinat
37	60.5	12.2	285	2	A97561	hypothetical prote
38	60.5	12.2	371	1	WMBEY0	dUTP diphosphatase
39	60	12.1	271	2	D70591	hypothetical prote
40	60	12.1	325	2	F96921	oligopeptide trans
41	60	12.1	424	2	T33552	hypothetical prote
42	60	12.1	480	2	T50511	serine-type carbox
43	60	12.1	704	2	B84685	hypothetical prote
44	60	12.1	1036	2	E84620	hypothetical prote
45	60	12.1	1205	1	A38943	nitric-oxide synth
46	59.5	12.0	448	2	H71342	probable carboxyl-
47	59.5	12.0	589	2	A71277	arginine-tRNA liga
48	59.5	12.0	3396	2	T22613	hypothetical prote
49	59	11.9	231	2	D82555	heme ABC transport
50	59	11.9	358	2	H83380	O6-methylguanine-D
51	59	11.9	401	2	G64161	hypothetical prote
52	59	11.9	509	2	T22238	hypothetical prote
53	59	11.9	702	2	T16533	hypothetical prote
54	59	11.9	1013	2	T16244	hypothetical prote
55	59	11.9	1019	1	A32856	collagen alpha 1(V
56	58.5	11.8	313	2	C81288	probable sugar-nuc
57	58.5	11.8	320	2	T36062	probable ABC-type
58	58.5	11.8	323	2	E69177	conserved hypothet
59	58.5	11.8	665	1	VCMVKA	env polyprotein pr
60	58.5	11.8	1150	2	H96501	probable retroelem
61	58.5	11.8	3796	2	T18514	lysosomal traffick
62	58	11.7	701	2	JN0674	ubiquitin-like fus
63	58	11.7	1013	2	I50615	receptor-type prot
64	58	11.7	1170	2	A72287	hypothetical prote
65	57.5	11.6	160	2	T33883	hypothetical prote
66	57.5	11.6	237	2	G72676	hypothetical prote
67	57.5	11.6	416	2	A88109	protein C46E10.9 [
68	57.5	11.6	481	2	A95278	hypothetical prote
69	57.5	11.6	1477	2	T18534	protein-tyrosine k
70	57.5	11.6	1722	1	I78879	retinoblastoma bin

71	57	11.5	99	2	T02626	hypothetical prote
72	57	11.5	168	2	H64034	hypothetical prote
73	57	11.5	244	2	S57042	hypothetical prote
74	57	11.5	292	2	E89846	hypothetical prote
75	57	11.5	412	2	T16480	hypothetical prote
76	57	11.5	528	2	T21682	hypothetical prote
77	57	11.5	605	2	JC5673	receptor tyrosine
78	57	11.5	610	2	I48612	developmental kina
79	57	11.5	626	2	I48614	developmental kina
80	57	11.5	975	2	I48974	receptor-protein t
81	57	11.5	998	2	JC5672	receptor tyrosine
82	57	11.5	998	2	I58351	receptor protein-t
83	57	11.5	1015	2	JC5263	transmembrane tyro
84	57	11.5	1015	2	JC5062	phogrin precursor
85	57	11.5	2171	2	E86342	hypothetical prote
86	57	11.5	3412	1	GNWVTB	genome polyprotein
87	56.5	11.4	119	2	T02375	finger protein BBF
88	56.5	11.4	140	2	T16574	hypothetical prote
89	56.5	11.4	143	2	G84471	En/Spm-like transp
90	56.5	11.4	209	2	H85062	hypothetical prote
91	56.5	11.4	232	2	AC3152	C factor [imported
92	56.5	11.4	232	2	H98135	probable Rossman f
93	56.5	11.4	407	2	T00989	hypothetical prote
94	56.5	11.4	632	2	H70339	NADH2 dehydrogenas
95	56.5	11.4	841	1	VGBE37	glycoprotein H - h
96	56.5	11.4	1388	2	T34157	hypothetical prote
97	56	11.3	177	2	S33166	protective antigen
98	56	11.3	209	2	A48388	glutathione S-tran
99	56	11.3	218	1	WZBEF4	gene 62 protein -
100	56	11.3	225	2	G89936	conserved hypothet

ALIGNMENTS

RESULT 1

B72658

hypothetical protein APE0690 - Aeropyrum pernix (strain K1)

C;Species: Aeropyrum pernix

C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-Jun-2000

C;Accession: B72658

R;Kawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, K.; Takahashi, M.; Sekine, M.; Baba, S.; Ankai, A.; Kosugi, H.; Hosoyama, A.; Fukui, S.; Nagai, Y.; Nishijima, K.; Nakazawa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; Kushida, N.; Oguchi, A.; Aoki, K.; Kubota, K.; Nakamura, Y.; Nomura, N.; Sako, Y.; Kikuchi, H.

DNA Res. 6, 83-101, 1999

A;Title: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, Aeropyrum pernix K1.

A;Reference number: A72450; MUID:99310339; PMID:10382966

A;Accession: B72658

A;Status: preliminary

A;Molecule type: DNA

A;Residues: 1-214 <KAW>

A;Cross-references: DDBJ:AP000060; NID:g5104188; PIDN:BAA79666.1; PID:d1043452; PID:g5104351

A;Experimental source: strain K1

C;Genetics:
A;Gene: APE0690
C;Superfamily: Aeropyrum pernix hypothetical protein APE0690

Query Match 15.4%; Score 76.5; DB 2; Length 214;
Best Local Similarity 31.6%; Pred. No. 0.48;
Matches 24; Conservative 11; Mismatches 24; Indels 17; Gaps 3;

```
Qy      3 GPGHPLL-----LGLLLVLGPSPEQRVEIVPRDLRMKDKFL----KHLTGPLYFSP 49
      |||: ||      : | |||:|      |: || :: |      :|| || : ||
Db      47 GPGYNLLQHVVGYPVVNKYLALGPNP----PILLLDLLLRNHMLPKLLQRHLIGPPHESP 102

Qy      50 KCSKHFHRLYHNTRDC 65
      |: | | : |
Db      103 FSVLHYVALVHYSYDC 118
```

RESULT 2

T39863
zinc finger protein - fission yeast (*Schizosaccharomyces pombe*)
C;Species: *Schizosaccharomyces pombe*
C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 03-Dec-1999
C;Accession: T39863
R;Wood, V.; Rajandream, M.A.; Barrell, B.G.; Skelton, J.; Churcher, C.M.
submitted to the EMBL Data Library, August 1997
A;Reference number: Z21886
A;Accession: T39863
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-565 <WOO>
A;Cross-references: EMBL:Z98270; PIDN:CAB10978.1; GSPDB:GN00067; SPDB:SPBC1D7.02
A;Experimental source: strain 972h-; cosmid c1D7
C;Genetics:
A;Gene: SPDB:SPBC1D7.02
A;Map position: 2

Query Match 14.2%; Score 70.5; DB 2; Length 565;
Best Local Similarity 40.0%; Pred. No. 6.3;
Matches 20; Conservative 3; Mismatches 14; Indels 13; Gaps 2;

```
Qy      46 YFSPKCSKHFHRLYHNTRD-----CTIPAYYKRCARL--LTRLA 82
      | | |:| |:| | | |      || | || :| ||| |
Db      26 YKCPLCTKAFYRLEHQTRHIRTHTGEKPHVCTFPGCAKRFSRDELTRHA 75
```

RESULT 3

A41694
regulatory protein creA - *Emericella nidulans*
C;Species: *Emericella nidulans*, *Aspergillus nidulans*
C;Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 30-Sep-1993
C;Accession: A41694
R;Dowzer, C.E.A.; Kelly, J.M.
Mol. Cell. Biol. 11, 5701-5709, 1991
A;Title: Analysis of the creA gene, a regulator of carbon catabolite repression
in *Aspergillus nidulans*.
A;Reference number: A41694; MUID:92017851; PMID:1922072
A;Accession: A41694

A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-416 <DOW>

Query Match 14.1%; Score 70; DB 2; Length 416;
Best Local Similarity 28.1%; Pred. No. 5.2;
Matches 25; Conservative 8; Mismatches 28; Indels 28; Gaps 3;

```
Qy      5 GHPLLLGLLLVLGPSPEQRVEIVPRDLRMKDKFLKHLTGPLYFSPKCSKHFHRLYHNTRD 64
          |  |  ::  |: |:  : :||          |  |  :  |||  |  ||
Db      38 GASLLPPMVKGARPAABEARQDLPRP-----YKCPLCERAFHRLEHQTRH 82

Qy      65 -----CTIPAYYKRCARL--LTR 80
          |  |  ||  :|  |||
Db      83 IRTHTGEKPHACQFPGCSKRFSRDELTR 111
```

RESULT 4

T27523

hypothetical protein ZC373.5 - *Caenorhabditis elegans*

C;Species: *Caenorhabditis elegans*

C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 18-Feb-2000

C;Accession: T27523

R;Kershaw, J.

submitted to the EMBL Data Library, April 1995

A;Reference number: Z20382

A;Accession: T27523

A;Status: preliminary; translated from GB/EMBL/DDBJ

A;Molecule type: DNA

A;Residues: 1-284 <WIL>

A;Cross-references: EMBL:Z49131; PIDN:CAA88977.1; GSPDB:GN00028; CESP:ZC373.5

A;Experimental source: clone ZC373

C;Genetics:

A;Gene: CESP:ZC373.5

A;Map position: X

A;Introns: 26/3; 75/2; 114/1; 236/2

Query Match 13.9%; Score 69; DB 2; Length 284;
Best Local Similarity 31.6%; Pred. No. 4.5;
Matches 31; Conservative 13; Mismatches 36; Indels 18; Gaps 6;

```
Qy      1 MRGPGHPL--LLGLLLVLGPSPEQRVEIVPRDL---RMKDKF-----LKHLTGPLYFSP 49
          |||  |  :  :  |  |:: ||  |:  |  ::  |||  |  :|
Db      46 MRGSGGAMGCISGSELMISPSALQKERIREQDVVFVYNMKDKTEVQRPPNKRIT-----VS 100

Qy      50 KCSKHFHRLYHNT-RDCTIPAYYKRCARLLTRLAVSPV 86
          ||  |  :  |  :|  |  :  ||  |:|:|  ||
Db      101 SCSVLFSLIMKETGSECVIHTHSK-CANLITQLIKSNV 137
```

RESULT 5

B84104

transcription regulator (AraC/XylS family) BH3634 [imported] - *Bacillus halodurans* (strain C-125)

C;Species: *Bacillus halodurans*

C;Date: 01-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 15-Jun-2001

C;Accession: B84104

R;Takami, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; Hiramata, C.; Nakamura, Y.; Ogasawara, N.; Kuhara, S.; Horikoshi, K.
 Nucleic Acids Res. 28, 4317-4331, 2000
 A;Title: Complete genome sequence of the alkaliphilic bacterium *Bacillus halodurans* and genomic sequence comparison with *Bacillus subtilis*.
 A;Reference number: A83650; MUID:20512582; PMID:11058132
 A;Accession: B84104
 A;Status: preliminary
 A;Molecule type: DNA
 A;Residues: 1-300 <STO>
 A;Cross-references: GB:AP001519; GB:BA000004; NID:g10176109; PIDN:BAB07353.1; GSPDB:GN00137
 A;Experimental source: strain C-125
 C;Genetics:
 A;Gene: BH3634

Query Match 13.9%; Score 69; DB 2; Length 300;
 Best Local Similarity 34.9%; Pred. No. 4.7;
 Matches 22; Conservative 4; Mismatches 17; Indels 20; Gaps 3;

```
Qy      32 RMKDKFLKHLTGPL-----YFSPKCSKHFHRLYHNTRDCTIPAYYKRCARLLT 79
      | | | | | : | | | | | | | | | | | | | | | | | |
Db      9 RAIDYIETHLHEPISLEKVAAHASYSYF-----HFHRLFKATVGCTMSEYIKR--RRLT 60

Qy      80 RLA 82
      : |
Db      61 KAA 63
```

RESULT 6

JN0785

Carbon catabolite repressor protein - *Aspergillus niger*

C;Species: *Aspergillus niger*

C;Date: 24-Feb-1994 #sequence_revision 24-Feb-1994 #text_change 21-Jul-2000

C;Accession: JN0785

R;Drysdale, M.R.; Kolze, S.E.; Kelly, J.M.

Gene 130, 241-245, 1993

A;Title: The *Aspergillus niger* carbon catabolite repressor encoding gene, *creA*.

A;Reference number: JN0785; MUID:93366180; PMID:8359691

A;Accession: JN0785

A;Molecule type: DNA

A;Residues: 1-427 <DRY>

A;Cross-references: GB:L03811; NID:g166497; PIDN:AAA32690.1; PID:g166498

C;Comment: This protein plays a role as a negatively acting repressor protein regulating carbon catabolite repression.

C;Genetics:

A;Gene: *CreA*

C;Keywords: DNA binding; repressor; transcription regulation; zinc finger

F;73-128/Region: zinc finger

Query Match 13.9%; Score 69; DB 2; Length 427;
 Best Local Similarity 28.7%; Pred. No. 6.8;
 Matches 25; Conservative 7; Mismatches 23; Indels 32; Gaps 4;

```
Qy      7 PLLLGLLLVLGSPQEVRVEIVPRDLRMKDKFLKHLTGPLYFSPKCSKHFHRLYHNTRD-- 64
      ||: | | | | | | | | | | | | | | | | | | | | | |
Db     56 PLMKG---ARPATEEVRQDLPRP-----YKCPLCDRAFHRLEHQTRHIR 96
```